

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 7,161,912 B1  
APPLICATION NO. : 09/420275  
DATED : January 9, 2007  
INVENTOR(S) : Dajer et al.

Page 1 of 7

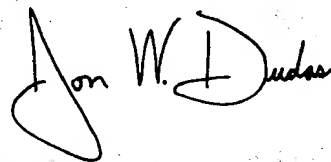
It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Delete Title page illustrating a figure, and substitute therefor, new Title page illustrating a figure. (attached)

Delete drawing sheets 1-6B, and substitute therefor drawing sheets 1-6B. (attached())

Signed and Sealed this

Eighth Day of May, 2007

A handwritten signature in black ink, reading "Jon W. Dudas". The signature is stylized, with a large loop for the "J" and a cursive "Dudas".

JON W. DUDAS  
*Director of the United States Patent and Trademark Office*

(12) **United States Patent**  
**Dajer et al.**

(10) Patent No.: **US 7,161,912 B1**  
 (45) Date of Patent: **Jan. 9, 2007**

(54) **MULTI-CARRIER/MULTI-SECTOR  
 CHANNEL POOLING IN A WIRELESS  
 COMMUNICATION SYSTEM BASE STATION**

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(\*) Notice: Subject to any disclaimer, the term of this  
 patent is extended or adjusted under 35  
 U.S.C. 154(b) by 0 days.

(21) Appl. No.: 09/420,275

(22) Filed: Oct. 18, 1999

(51) Int. Cl.  
 H04Q 7/20 (2006.01)

(52) U.S. Cl. .... 370/328; 370/342; 370/346;  
 455/561; 455/550.1

(58) Field of Classification Search ..... 370/328,  
 370/329, 335, 342, 343, 441; 455/561, 562,  
 455/59, 60; 375/130

See application file for complete search history.

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(57) **ABSTRACT**

A wireless communication system base station includes a number of channel unit boards, each including multiple channel elements for providing processing operations for signals assigned to multiple carriers of the system. A given channel unit board includes a multiplexer which is operative to implement multi-carrier/multi-sector channel pooling by assigning a given one of the channel elements of that board to any one of the multiple carriers of the system. For example, the multiplexer in the given channel board may be operative to connect the channel elements of that board to I/Q signal buses associated with different system carriers. The I/Q signal bus for each of the carriers is then combined on the given board with corresponding signals from other boards. The invention allows each of N channel elements of the given channel unit board to be assigned to a particular one of up to N carriers of the system, thereby providing substantially improved flexibility in terms of system configuration.

27 Claims, 5 Drawing Sheets

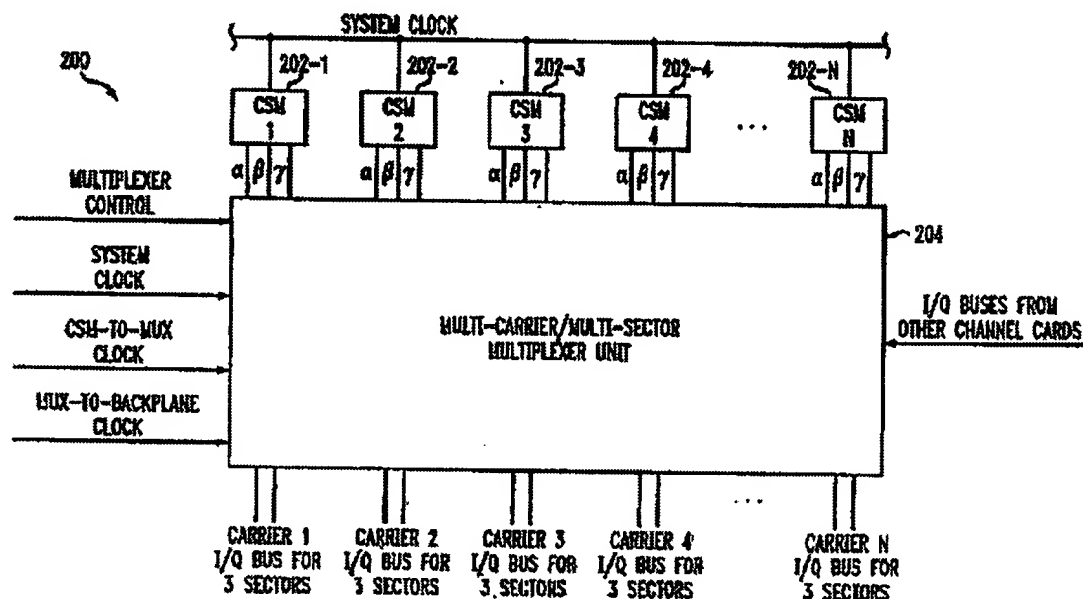
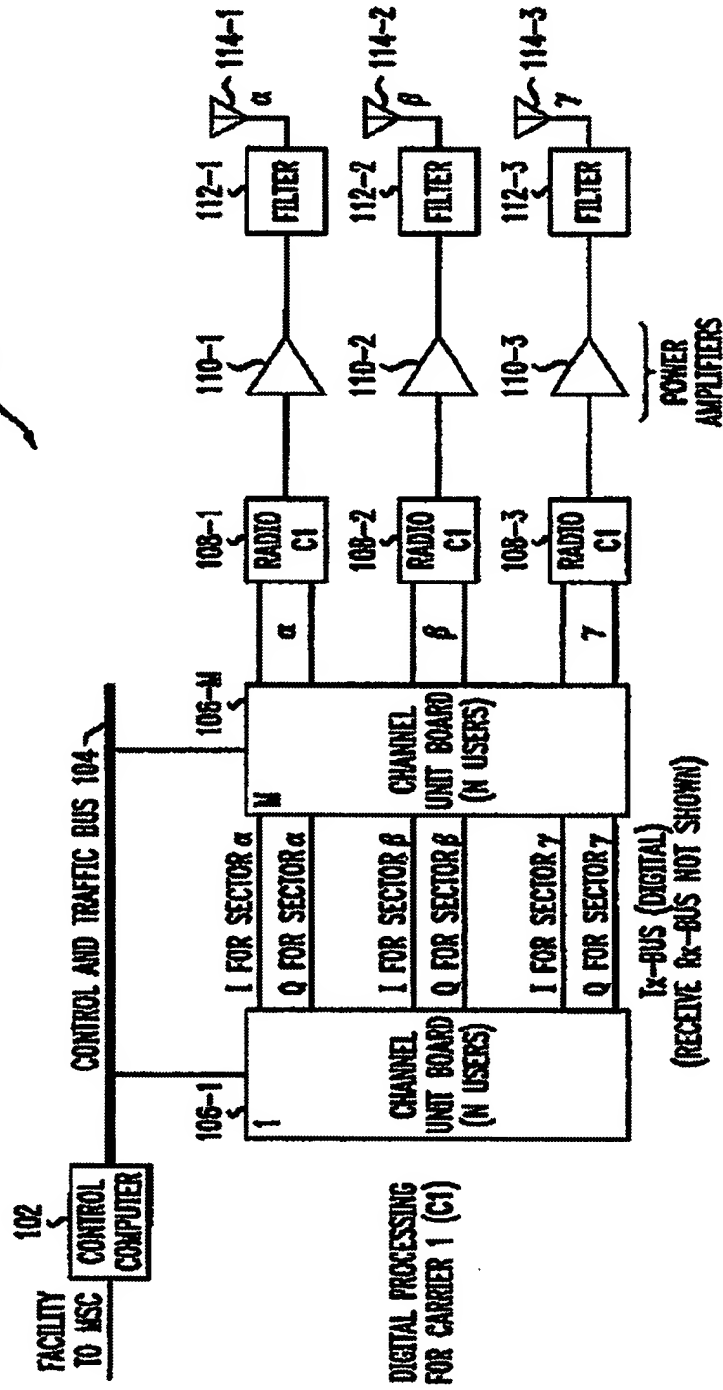
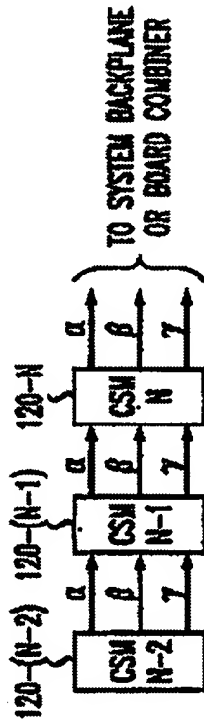


FIG. 1

PRIOR ART



**FIG. 2**  
PRIOR ART



**FIG. 3**  
PRIOR ART

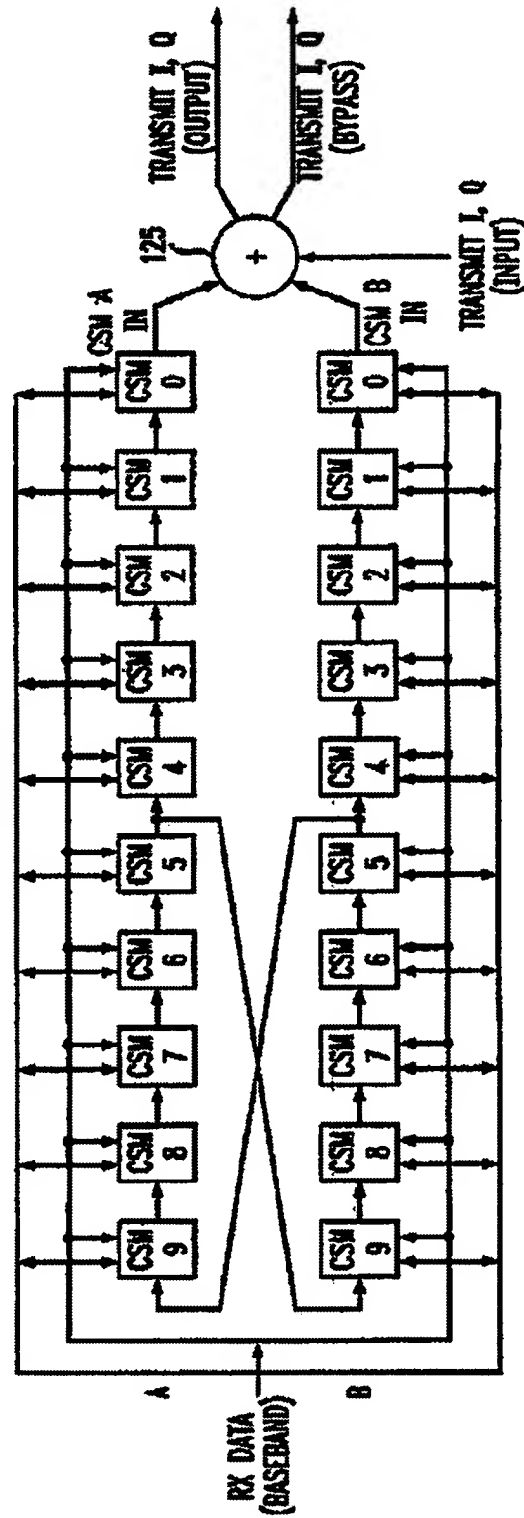


FIG. 4

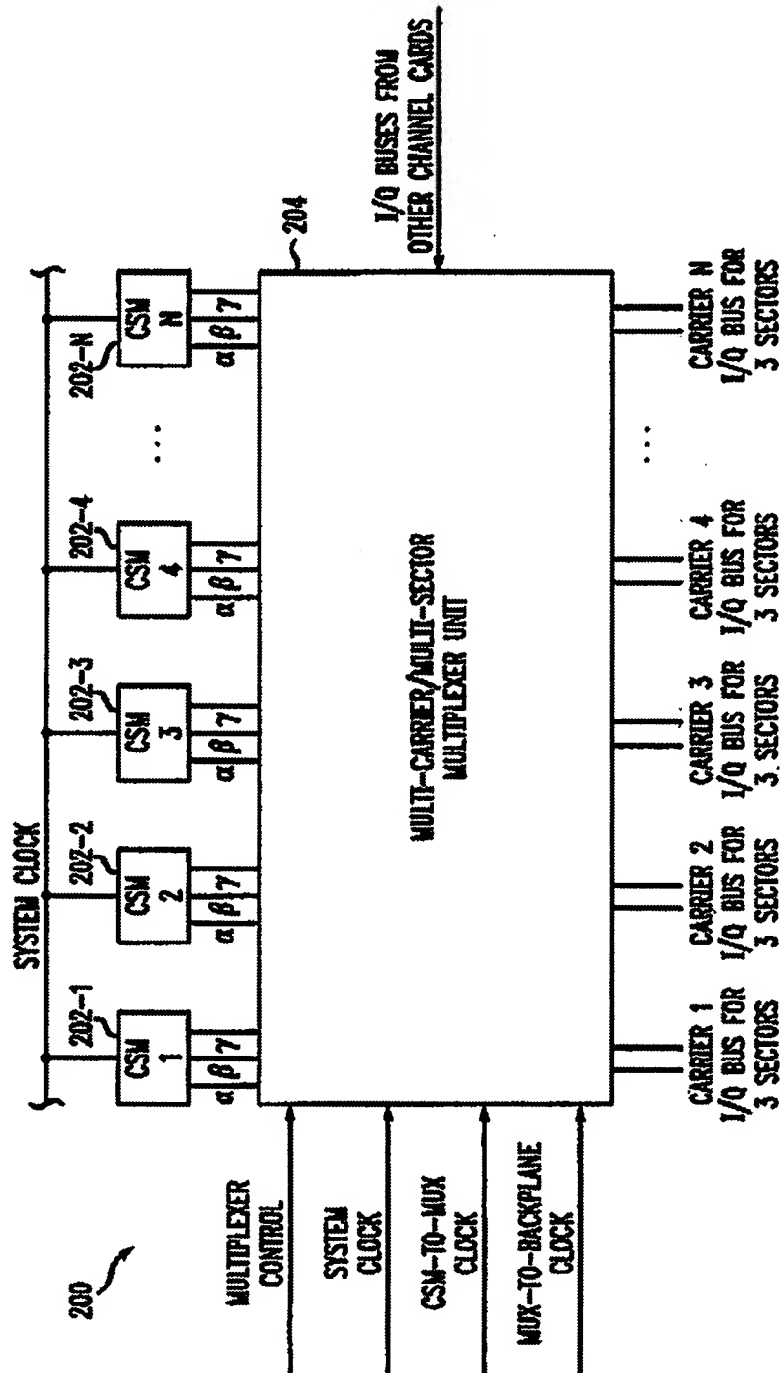


FIG. 5

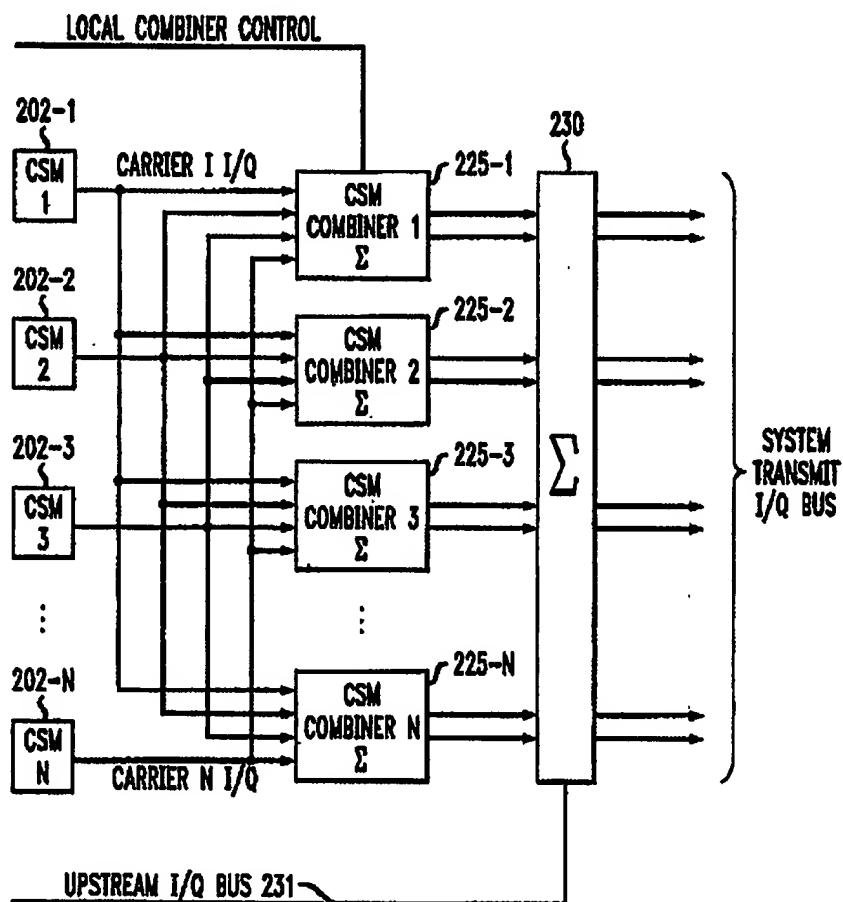


FIG. 6A

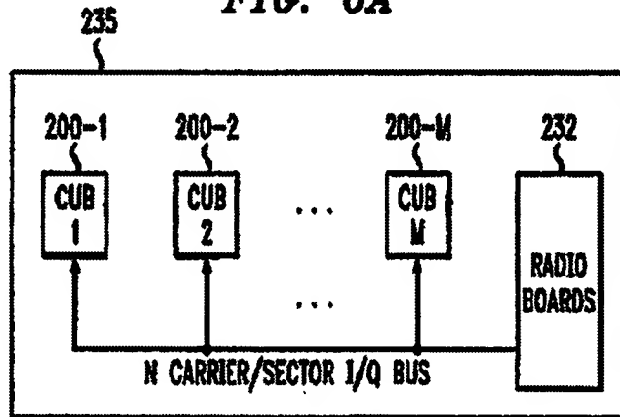


FIG. 6B

